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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/856,640	05/23/2001	Akira Tsubokura	38331-0002	3145

26633 7590 06/16/2003

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EXAMINER

SAUCIER, SANDRA E

ART UNIT PAPER NUMBER

1651

DATE MAILED: 06/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/856,640

Applicant(s)

Tsubokura et al.

Examiner

Sandra Saucier

Art Unit

1651



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Apr 14, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above, claim(s) 7-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                              | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ | 6) <input type="checkbox"/> Other:  |

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#### **DETAILED ACTION**

Claims 1-11 are pending. Claims 1-6 and 11 are considered on the merits. Claims 7-10 are withdrawn from consideration as being drawn to a non-elected invention.

#### ***Claim Rejections – 35 USC § 112 NEW MATTER***

Claims 1-6 and 11 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Applicant has not pointed to the location in the text where the new limitation in claim 1, "with leaving the cell membrane and cell wall intact" is located. It appears to be new matter which was not disclosed in the as filed specification and original claims. Please point to the location where support is found for this recitation or cancel it.

#### ***INDEFINITE***

Claims 1-6 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is not clear in its recitation of the process. It might better read, "prepared by the process of culturing microbial cells, centrifuging or filtering the cells and drying the cells" or be written as below.

Claim 11 refers to the process of claim 1; however, claim 1 is a product claim not a process claim. Inclusion of all steps in an independent product by process claim might be clearer.

1. A pigment-containing substance for inclusion as a feed additive produced by the method comprising:  
culturing a microbe capable of producing carotenoid compounds,  
centrifuging or filtering the microbial cells to remove the culture medium,  
drying the cells so that at least 3% by mass of the dried microbial cells is carotenoid compounds.

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11. A pigment-containing substance for inclusion as a feed additive produced by the method comprising:  
culturing a microbe capable of producing carotenoid compounds,  
centrifuging or filtering the microbial cells to remove the culture medium,  
adding water to the cells,  
suspending the cells in the water,  
separating the water from the cells to remove dissolved medium ingredients,  
drying the cells so that at least 3% by mass of the dried microbial cells is carotenoid compounds.

***Claim Rejections – 35 USC § 102***

Claims 1–6 and 11 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP 09–308481 [A01].

The claims are directed to a culture “precipitate” which comprises at least 3 mass % of carotenoids.

The references are relied upon as explained below.

JP 09–308481 discloses a process of culturing FERM BP–4283, separating the biomass from the medium by centrifugation, washed with water and dried by spray drying, see example and Table 12. The dried biomass contains carotenoid compounds greater than 3% by mass and is used as a feed additive.

While applicant is using the term, “precipitate” incorrectly, see Grant and Hackh’s Chemical Dictionary appended, to mean that the cells which have been cultured have been removed from the medium by filtration or centrifugation (specification page 4, last paragraph), the claim is examined in the light of the specification to include centrifugation and filtration as “precipitation” means.

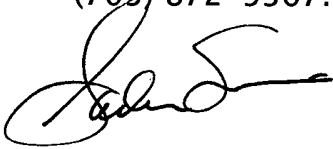
Please note that to truly precipitate a substance from solution requires that the substance initially be soluble in the solution and then rendered insoluble by heat, chemical reaction, etc.. Cells cannot be precipitated from a solution because they are not soluble in the solution, but merely are suspended in the culture medium.

To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit

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1651. The supervisor for 1651 is M. Wityshyn, (703) 308-4743. The normal work schedule for Examiner Saucier is 8:30AM to 5:00 PM Monday, Tuesday and 8:30 AM to noon on Wednesday.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra Saucier whose telephone number is (703) 308-1084. **Status inquiries must be directed to the Customer Service Desk at (703) 308-0197 or (703)-308-0198.** The number of the Fax Center for the faxing of official papers is (703) 872-9306 or for after finals (703) 872-9307.

A handwritten signature in black ink, appearing to read 'Sandra Saucier', with a stylized flourish at the end.

Sandra Saucier  
Primary Examiner  
Art Unit 1651  
June 12, 2003